

Remarks

Applicant offers no amendment to claims 1 to 48 as filed since in the applicant's view these claims patentably distinguish the present invention over Kanerva et al (US5793744), Bi et al (US 2002/0036999), Smith et al (US6009124) and Willars et al (US6449290), either taken singly or in any combination.

The Examiner has maintained his rejection of claims 1 to 3 & 5 to 14 under 35 U.S.C. §103(a) as being obvious having regard to Kanerva in light of Bi. The Examiner has based his rejection of these claims on the contention that Kanerva teaches a data connection having a number of parallel sub-channels to provide increasing wireless bandwidth to support new high-speed data services. The Examiner accepts that Kanerva does not discuss communicating with a plurality of base stations, but that communicating with a plurality of base stations is well known in the art and that Bi is presented as merely representative of this well known feature of the art.

Applicant respectfully disagrees with the Examiner's conclusion for the following reasons.

The present invention is directed to enhancing the wireless link bandwidth in a cellular wireless communications system in which data traffic is communicated between a remote terminal (132), such as a web content server, for example, in an external network, via a wireless communications system MSC (128) and a plurality of base stations to a wireless communications system terminal (200). This is achieved by establishing a plurality of simultaneous but separate communications links between the terminal and the plurality of base stations. It is implicit therefore that said terminal is located within the respective geographical coverage areas (cells) of said plurality of base stations and that the arrangement of the present invention is limited to one in which the geographical

coverage areas of such base stations are arranged to overlap. Additionally, each of the plurality of simultaneous communications links carries some of the data traffic being communicated from the MSC via the plurality of base stations to the terminal, where the data traffic content of each such link comprises a different (i.e. non-identical) part of said data traffic.

Kanerva teaches a mobile cellular wireless communications system in which a mobile terminal establishes a single (one to one) communications link with a base station in whose cell it is located. The single communications link comprises a multiplicity of sub-channels, e.g. time-slots or carriers, as a means of increasing the link bandwidth. There is no suggestion in Kanerva of establishing further communication links simultaneously between the mobile terminal and other base stations in order to enhance the wireless link bandwidth.

A skilled addressee will be fully cognizant of the fact that the mobile cellular wireless communications system as taught by Kanerva is of a conventional structure in as far as the geographical coverage areas of the base stations are arranged such that they mesh together to provide continuous wireless coverage but do not overlap, although in practice some overlap at the margins of adjacent cells does occur. It is in this context that the teaching of Bi of a mobile terminal communicating with two or more base stations in a soft handoff arrangement is relevant.

A skilled addressee will be aware that Bi, like Kanerva, is generally representative of mobile cellular wireless communications systems in which the geographical coverage areas of the base stations are arranged such that they mesh together to provide continuous wireless coverage but do not overlap. In such a system, a mobile terminal establishes a single call connection (communications link) with a base station in whose cell it is located, but that, as the mobile terminal moves to a point where it is exiting the coverage area of the

*does the defendant
claim in Bi that
this
arrangement*

cell, a handoff process must occur with the base station of an adjacent cell to ensure that the call connection is continued and not lost.

- This is simply to provide the best quality signal but for other base stations could continue communication w/ the MS

Soft handoff is a technique common to mobile cellular wireless communications systems enabling a mobile terminal to communicate with two or more base stations at the same time during the handoff process. Soft handoff eliminates the potential ping-ponging of handoff that can occur where there are regions of overlap at the edges of adjacent cells (cf Bi, paragraph 0003, lines 1-4 and paragraph 0004, lines 4-7).

However, when a high number of base stations is involved in a soft handoff this presents a high overhead on the transmit power needs and degrades the actual capacity of the wireless system (cf Bi, paragraph 0005, lines 10-13). Thus, Bi reveals that allowing a mobile terminal in a mobile cellular wireless communication system to communicate with a plurality of base stations degrades the wireless system capacity (available bandwidth) and it is for this reason that Bi proposes the use of simulcasting elements (repeaters) at the margins of cells where the signal strengths of adjacent base stations are within a close range of each other in order to improve the handoff process, but not to provide additional communications links with other base stations carrying different parts of a data traffic for a wireless system terminal.

Examiner is not using the teaching of communication with more than 1 base station

It follows from the above that Bi teaches against the present invention in that it teaches that it is undesirable to allow a wireless communications terminal to communicate simultaneously with a plurality of base stations even in a handoff process.

Since Bi is representative of the feature of the art that it is known for a terminal to communicate with a plurality of base stations in a soft handoff process which causes degradation of system capacity, it is clear that the present

invention goes against the teaching of the art and cannot be considered to be obvious in light of Kanerva and Bi (or the art as generally known).

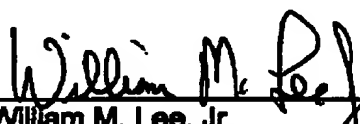
Applicant also maintains as pertinent the whole of the content of its response of January 3rd 2004.

All other grounds of rejection are moot in view of the above.

Having regard to the above submission, applicant requests favorable reconsideration of claims 1 to 48 which are believed to define an invention which is both novel and non-obvious having regard to the prior art references relied on by the Examiner taken in any combination.

Respectfully submitted,

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